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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Dhirendra Pandey

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EXAMINER

WAI, ERIC CHARLES

ART UNIT

PAPER NUMBER

2195

MAIL DATE

DELIVERY MODE

05/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/675,479	Applicant(s) PANDEY ET AL.	
	Examiner ERIC C. WAI	Art Unit 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-21 are presented for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claim 11 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

4. Claim 11 recites a "system means"; however, it appears that the system would reasonably be interpreted by one of ordinary skill in the art as software per se, failing to be tangibly embodied or include any recited hardware as part of the system. Software is equivalent means of the claimed system.

5. Even though Applicant has invoked the rebuttable presumption that 35 USC 112, 6th paragraph applies in the claim interpretation of the "means," corresponding "structure" in the disclosure is not automatically and inherently limited to hardware-inclusive embodiments. It is entirely possible for the corresponding disclosed "means" to cover an embodiment of software alone; e.g. a software program, subroutine, a set of instructions.

6. Use of the word "system" does not inherently mean that the claim is directed to a machine. Only if at least one of the claimed elements of the system is a physical part of a device can the system as claimed constitute part of a device or a combination of

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devices to be a machine within the meaning of 101. In addition the description of Fig 2 beginning at page 9 does not cure the problem since it states the system as other suitable devices. Virtual machines are software systems and can constitute the system.

7. Furthermore, Claim 11 recites, “means for creating a plurality of client-side Object Request Brokers (ORBs) on a client machine”. Claim 11 does not claim the client machine itself, only the means for implementing the invention on a client machine.

Therefore, the structural equivalents for performing the means would be interpreted by one of ordinary skill in the art as software per se.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 5-6, 10-12, 16-17, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gigliotti et al. (US Pat No. 6,393,458 hereinafter Gigliotti).

10. Regarding claim 1, Gigliotti teaches a system, comprising:

one or more host machines configured to implement a plurality of instances of an application server (Fig 3, Server 44, wherein there are multiple server hosts 58, 60, 62, 64, and 66);

one or more client computer machines each configured to implement one or more clients of the application server (Fig 3, wherein Client 42 can be a single machine), wherein each client on a respective one of the one or more client machines (Fig 3, Client Object 45, 46, 48, 50) is configured to:

create a plurality of client-side Object Request Brokers (ORBs), wherein each client-side ORB is coupled to a server-side ORB of a different one of the plurality of application server instances (col 4, lines 30-31, col 5 lines 53-56, Fig 3, wherein each client instance is connected to a server host through a load balancer using ORB);

select one of the plurality of client-side ORBs on the client machine according to a load balancing scheme in response to a request to access the application server (col 6 lines 37-39, wherein a load balancer, residing on client 42, determines a balanced distribution); and

access a particular one of the plurality of application server instances via the selected client-side ORB coupled to a server-side ORB of the particular application server instance (col 7 lines 21-24).

11. Gigliotti does explicitly state the existence of client-side and server-side ORBs. However, it would have been obvious to one of ordinary skill in the art, that ORBs exist at both the client and server in order for the ORB protocol to be used.

12. Regarding claim 5, Gigliotti teaches that each client is further configured to:

select a different one of the plurality of client-side ORBs on the client machine according to the load balancing scheme in response to another request to access the

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application server (col 6 lines 37-56, wherein the load balancer chooses a different server host to process the request); and

access a different one of the plurality of application server instances using the different client-side ORB coupled to a server-side ORB of the different application server instance (col 7 lines 21-24, wherein the request is directed to the server).

13. Regarding claims 6 and 10-11, they are rejected for the same reasons as claims 1 and 5 above.

14. Regarding claims 12, 16, 17, and 21, they are the method and computer accessible medium claims of claims 1 and 5 above. Therefore, they are rejected for the same reasons as claims 1 and 5 above.

15. Claims 2-4, 7-9, 13-15, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gigliotti et al. (US Pat No. 6,393,458) in view of Applicant's Admitted Prior Art (AAPA).

16. Regarding claim 2, Gigliotti does not teach that the access of a particular one of the plurality of application server instances via the selected client-side ORB is performed according to RMI-IIOP.

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17. AAPA teaches that RMI allows objects on different computers to interact in a distributed network (pg 1 lines 10-13). AAPA also teaches that IIOP is a protocol that allows distributed programs written in different programming languages to communicate over the Internet (pg 2 lines 5-7).

18. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gigliotti to use RMI-IIOP. One would be motivated by the desire to apply the teachings of Gigliotti to distributed computed where the different computing nodes operate on different programming languages as indicated by Gigliotti.

19. Regarding claims 3-4, Gigliotti does not teach that the creation of a plurality of client-side ORBs and said selection of one of the plurality of client-side ORBs according to a load balancing scheme are performed by a Context Factory class, wherein the Context Factory class is a JNDI Factory Class.

20. AAPA teaches using JNDI to provide naming and directory functionality to applications written in the Java programming language (pg 2 lines 26-27).

21. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gigliotti by including the use of JNDI. One would be motivated by the desire to access a variety of services (new, emerging, already deployed) in a common way as indicated by AAPA (pg 2 lines 29-30).

22. Regarding claims 7-9, they are rejected for the same reasons as claims 2-4 above.

23. Regarding claims 13-15, and 18-20, they are the method and computer accessible medium claims of claims 2-4 above. Therefore, they are rejected for the same reasons as claims 2-4 above.

Response to Arguments

24. Applicant's arguments filed 2/11/2008 have been fully considered but they are not persuasive.

25. Applicant argues on pg 12 of Remarks:

“Applicants' amendments clarify that each client is implemented on a respective individual client machine, that one of the plurality of client-side ORBs on the client machine is selected. Thus, the Examiner's interpretation is no longer applicable. Similar amendments were made to the other independent claims.”

26. Examiner disagrees. Gigliotti teaches that the load balancing system may be implemented in a network, where the term “network” may be a single computer consisting of multiple processors such as a parallel computer (col 7 lines 36-44).

Therefore, under Gigliotti, the Client 84 and Load Balancer 80 of Fig 4, can be located on the same client machine. Such an interpretation reads upon the claimed invention.

Furthermore, the claim language allow for more than one client to be implemented on a

client machine, and also allow for an ORB connection on the load balancer to be selected since the load balancer is part of the client machine in Gigliotti.

Conclusion

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric C. Wai whose telephone number is 571-270-1012. The examiner can normally be reached on Mon-Thurs, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng - Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

/Eric C Wai/
Examiner, Art Unit 2195

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